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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/736,197      | 12/15/2003  | Patrick Rocco Guido  | 5577-287            | 4343             |

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Raleigh, NC 27627

EXAMINER

NGUYEN, CAO H

ART UNIT PAPER NUMBER

2173

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 01/12/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/736,197

Applicant(s)

GUIDO ET AL.

Examiner

Cao (Kevin) Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1, 9 and 17 are not tangible. The preamble of independent claim 1, 9 and 17 recites " A method for displaying a set of hierarchical data and a set of non-hierarchical data on an electronic display", which is directed to software, per se, lacking any hardware to enable any functionality to be realized. The claimed features and elements of independent claims 1, 9 and 17 do not include hardware components or features that are necessarily implemented in hardware. Therefore, the claimed features of claims 1, 9 and 17 are actually a software, or at best, directed to an arrangement of software, and software claimed by itself, without being executed or implemented on a computer medium, is intangible.

To expedite a complete examination of the instant application, the claims rejected under 35U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of the applicant amending these claims to place them within the four statutory categories of invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kierman et al. (US Patent No. 5,701,137) in view of Gasser (US Patent No. 6,636,250).

Regarding claims 1 and 17, Kierman discloses a method for displaying a set of hierarchical data and a set of non-hierarchical data on an electronic display, the method comprising displaying at least part of the set of hierarchical data on the electronic display in a tree diagram that has a plurality of levels with one or more nodes present at each level (see col. 6, lines 7-50); however, Kierman fails to explicitly teach displaying the set of non-hierarchical data on the electronic display in a plurality of auxiliary nodes that are provided between at least some of the plurality of levels of the tree diagram.

Gasser discloses displaying the set of non-hierarchical data on the electronic display in a plurality of auxiliary nodes that are provided between at least some of the plurality of levels of the tree diagram (see col. 2, lines 23-42). It would have been obvious to one of ordinary skill in the art, having the teachings of Kierman and Gasser before him at the time the invention was

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made, to modify a set of hierarchical of Kierman to include the non-hierarchical diagram tree, as taught by Gasser. One would have been motivated to make such a combination in order to only be able to represent a limited number of hierarchical tree relationships within the graphical user interface at one point in time. Additionally, the hierarchical structure of a tree diagram may allow the user to more quickly and efficiently peruse the data, such as by reviewing the entries at the higher levels to locate particular branches which are most likely to contain the information of interest

Regarding claim 2, Kierman discloses further comprising displaying an expansion handle adjacent at least one of the nodes in the tree diagram, wherein the expansion handle is configured to expand or collapse the tree diagram at the at least one of the nodes (see col. 7, lines 45-65 and figure 6).

Regarding claim 3, Gasser discloses further comprising using the expansion handle to show or hide selected of the auxiliary nodes (see col. 14, lines 48-65).

Regarding claim 4, Gasser discloses further comprising pointing to the expansion handle with a pointing device while simultaneously double-clicking a control button on the pointing device to show or hide selected of the auxiliary nodes (see col. 15, lines 1-54).

Regarding claim 5, Gasser discloses wherein pointing to the expansion handle with a pointing device while pressing a first button on the pointing device operates to expand or collapse the tree diagram at the at least one of the nodes, and wherein pointing to the expansion handle with the pointing device while pressing a second button on the pointing device operates to show or hide selected of the auxiliary nodes (see col. 16, lines 11-62).

Regarding claim 6, Gasser discloses further comprising displaying a secondary expansion handle adjacent at least one of the nodes in the tree diagram, wherein the secondary expansion handle is configured to show or hide selected of the auxiliary nodes (see col. 17, lines 23-67).

Regarding claim 7, Gasser discloses wherein the expansion handle comprises a first type of icon and the secondary expansion handle comprises a second type of icon that is different than the first type of icon (see col. 18, lines 8-67).

Regarding claim 8, Kierman discloses wherein at least some of the nodes in the tree diagram comprise an expansion handle and a data entry connected by a horizontal connector, and wherein the method further comprises displaying a secondary expansion handle on or adjacent to at least one of the horizontal connectors (see col. 10, lines 3-60).

Claim 9 differs from claims 1 in that “expanding the tree diagram at one of the first plurality of nodes to display a second part of the set of hierarchical data in a second plurality of nodes that descend from the one of the first plurality of nodes; and expanding the one of the first plurality of nodes to display a plurality of auxiliary nodes that contain a portion of the set of non-hierarchical data” as recited in Gasser; see col. 31, lines 24-50. It would have been obvious to one of ordinary skill in the art, having the teachings of Kierman and Gasser before him at the time the invention was made, to modify a set of hierarchical of Kierman to include the non-hierarchical diagram tree, as taught by Gasser. One would have been motivated to make such a combination in order to only be able to represent a limited number of hierarchical tree relationships within the graphical user interface at one point in time. Additionally, the hierarchical structure of a tree diagram may allow the user to more quickly and efficiently peruse

the data, such as by reviewing the entries at the higher levels to locate particular branches which are most likely to contain the information of interest.

Regarding claim 10, Kierman discloses further comprising toggling an expansion handle adjacent the one of the first plurality of nodes to initiate the expansion of the tree diagram at one of the first plurality of nodes (see col. 11, lines 8-44).

Regarding claim 11, Kierman discloses further comprising using the expansion handle adjacent the one of the first plurality of nodes to initiate the display of the auxiliary nodes (see col. 8, lines 13-60).

Regarding claim 12, Kierman discloses further comprising toggling a second expansion handle located adjacent the expansion handle to initiate the display of the auxiliary nodes (see col. 10, lines 3-60).

Claim 13 differs from claims 1 and 9 in that “a plurality of auxiliary nodes that display at least a portion of the set of non-hierarchical data, wherein the plurality of auxiliary nodes are arranged in one or more auxiliary levels that are positioned between adjacent levels of the tree diagram; as recited in Gasser; see col. 25, lines 8-67 and figures 11-12. One would have been motivated to make such a combination in order to only be able to represent a limited number of hierarchical tree relationships within the graphical user interface at one point in time.

Additionally, the hierarchical structure of a tree diagram may allow the user to more quickly and efficiently peruse the data, such as by reviewing the entries at the higher levels to locate particular branches which are most likely to contain the information of interest.

Regarding claim 14, Kierman discloses further comprising a plurality of expansion handles, wherein each of the plurality of expansion handles is associated with one of the plurality

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of nodes and is configured to expand or contract the tree diagram at the respective one of the plurality of nodes (see col. 11, lines 8-44).

Regarding claim 15, Gasser discloses wherein at least some of the plurality of expansion handles are further configured to display or hide selected of the plurality of auxiliary nodes (see col. 14, lines 48-65).



Regarding claim 16, Gasser discloses further comprising at least one secondary expansion handle associated with at least some of the plurality of auxiliary nodes that is configured to display or hide selected of the plurality of auxiliary nodes (see col. 16, lines 11-61).

Claim 18 differs from claims 1 and 17 in that “a computer readable program code configured to expand the tree diagram at one of the first plurality of nodes to display a second part of the set of hierarchical data in a second plurality of nodes that descend from the one of the first plurality of nodes; and computer readable program code configured to expand the one of the first plurality of nodes to display a plurality of auxiliary nodes that contain a portion of the set of non-hierarchical data; as recited in Gasser see figures 3-9. One would have been motivated to make such a combination in order to only be able to represent a limited number of hierarchical tree relationships within the graphical user interface at one point in time. Additionally, the hierarchical structure of a tree diagram may allow the user to more quickly and efficiently peruse the data, such as by reviewing the entries at the higher levels to locate particular branches which are most likely to contain the information of interest.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see PTO-892).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cao (Kevin) Nguyen whose telephone number is (571)272-4053.

The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571)272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cao (Kevin) Nguyen  
Primary Examiner  
Art Unit 2173

01/06/07